



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

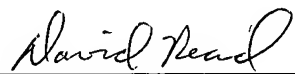
First Named Inventor : Charles L. Gray, Jr.
Application Number : 10/666,678
Filing Date : September 19, 2003
Invention Title : Low Emission Diesel Combustion System with Low
Charge-Air Oxygen Concentration Levels and High Fuel
Injection Pressures

Examiner Name :
Art Unit : 3748
Attorney Docket : 679-03

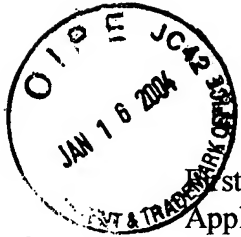
PETITION TO CORRECT INVENTORSHIP

Pursuant to 37 C.F.R. §1.48(a), applicant submits this petition to correct the inventorship in the above-referenced application by adding **Karl H. Hellman** as a co-inventor on the application. The inventive entity set forth in the executed \$1.63 Oath or Declaration is in error, omitting Karl H. Hellman as an inventor without any deceptive intention on the part of Mr. Hellman or the other inventors.

In support of this Petition, applicant submits the attached statement from Karl H. Hellman and an executed Oath or Declaration, as required by 37 C.F.R. §1.48(a).



David H. Read, Reg. No. 47,888
U.S. Environmental Protection Agency
National Vehicle and Fuel Emissions Laboratory
2565 Plymouth Road
Ann Arbor, MI 48105
Telephone: (734) 214-4367
Facsimile: (734) 214-4573
E-Mail: read.david@epa.gov



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor : Charles L. Gray, Jr
Application Number : 10/666,678
Filing Date : September 19, 2003
Invention Title : Low Emission Diesel Combustion System with Low
Charge-Air Oxygen Concentration Levels and High Fuel
Injection Pressures

Examiner Name :
Art Unit : 3748
Attorney Docket : 679-03

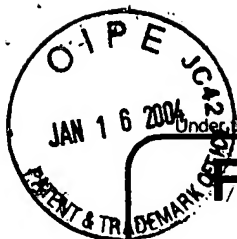
STATEMENT OF OMITTED INVENTOR KARL H. HELLMAN

IN SUPPORT OF PETITION TO CORRECT INVENTORSHIP

Pursuant to 37 C.F.R. §1.48(a)(2), I, **Karl H. Hellman**, do hereby declare that I am a co-inventor of the above-referenced patent application, that I was erroneously omitted as an inventor in the executed Oath or Declaration for the above-referenced patent application, and that such error in inventorship occurred without any deceptive intention on my part.

I declare the foregoing under penalty of perjury under the laws of the United States of America. This the 18th day of December, 2003.

Karl H. Hellman
Karl H. Hellman



FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$)

Complete if Known

Application Number	10/666,678
Filing Date	Sep. 19, 2003
First Named Inventor	Gray, Charles L.
Examiner Name	
Art Unit	3748
Attorney Docket No.	679-03

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:Deposit
Account
Number
Deposit
Account
Name

051128

U.S. Environmental Protection Agency

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1)			(\$)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

	Extra Claims	Fee from below	Fee Paid
Total Claims	-20** =	X	
Independent Claims	-3** =	X	
Multiple Dependent			

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 290	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2)

(\$)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1051 130	2051 65	Surcharge - late filing fee or oath
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet
1053 130	1053 130	Non-English specification
1812 2,520	1812 2,520	For filing a request for <i>ex parte</i> reexamination
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action
1251 110	2251 55	Extension for reply within first month
1252 420	2252 210	Extension for reply within second month
1253 950	2253 475	Extension for reply within third month
1254 1,480	2254 740	Extension for reply within fourth month
1255 2,010	2255 1,005	Extension for reply within fifth month
1401 330	2401 165	Notice of Appeal
1402 330	2402 165	Filing a brief in support of an appeal
1403 290	2403 145	Request for oral hearing
1451 1,510	1451 1,510	Petition to institute a public use proceeding
1452 110	2452 55	Petition to revive - unavoidable
1453 1,330	2453 665	Petition to revive - unintentional
1501 1,330	2501 665	Utility issue fee (or reissue)
1502 480	2502 240	Design issue fee
1503 640	2503 320	Plant issue fee
1460 130	1460 130	Petitions to the Commissioner
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)
1806 180	1806 180	Submission of Information Disclosure Stmt
8021 40	8021 40	Recording each patent assignment per property (times number of properties)
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))
1801 770	2801 385	Request for Continued Examination (RCE)
1802 900	1802 900	Request for expedited examination of a design application

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)

130

130

SUBMITTED BY

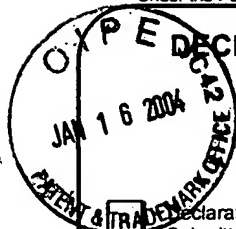
Name (Print/Type)	David H. Read	Registration No. (Attorney/Agent)	47,888	Telephone	(734) 214-4367
Signature	David Read	Date	Jan. 9, 2004		

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.



DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

☐ Declaration
Submitted
With Initial
Filing

OR

☒ Declaration
Submitted after Initial
Filing (surcharge
(37 CFR 1.16 (e))
required)

Attorney Docket Number	EPA 679-03
First Named Inventor	Charles L. Gray, Jr.
COMPLETE IF KNOWN	
Application Number	10/666,678
Filing Date	September 19, 2003
Art Unit	3748
Examiner Name	

I hereby declare that:

Each inventor's residence, mailing address, and citizenship are as stated below next to their name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Low Emission Diesel Combustion System with Low Charge-Air Oxygen Concentration Levels
and High Fuel Injection Pressures

(Title of the Invention)

the specification of which

☐ is attached hereto

OR

☒ was filed on (MM/DD/YYYY) 09/19/2003 as United States Application Number or PCT International

Application Number 10/666,678 and was amended on (MM/DD/YYYY) (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				Yes	No
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

DECLARATION — Utility or Design Patent ApplicationDirect all correspondence to: ☐ Customer Number: OR ☒ Correspondence address below**Name**

David H. Read

Address

National Vehicle and Fuel Emissions Laboratory, 2565 Plymouth Road

City

Ann Arbor

State

MI

ZIP

48105

Country

USA

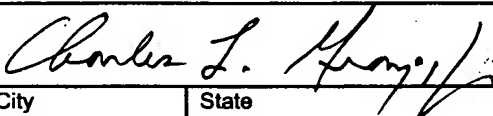
Telephone

(734) 214-4367

Fax

(734) 214-4573

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

NAME OF SOLE OR FIRST INVENTOR:☐ A petition has been filed for this unsigned inventor**Given Name**(first and middle (if any))
Charles L.**Family Name**or Surname
Gray, Jr.**Inventor's
Signature****Date****Residence: City**

Pinckney

State

MI

Country

USA

Citizenship

USA

Mailing Address

4323 Cordley lake Road

City

Pinckney

State

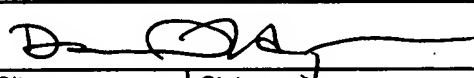
MI

ZIP

48169

Country

USA

NAME OF SECOND INVENTOR:☐ A petition has been filed for this unsigned inventor**Given Name**(first and middle (if any))
David James**Family Name**or Surname
Haugen**Inventor's
Signature****Date**

09 JAN 03

Residence: City

Ann Arbor

State

MI

Country

USA

Citizenship

USA

Mailing Address

5855 East Horizons Drive

City

Ann Arbor

State

MI

ZIP

48108

Country

USA



Additional inventors or a legal representative are being named on the _____ supplemental sheet(s) PTO/SB/02A or 02LR attached hereto.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

DECLARATION**ADDITIONAL INVENTOR(S)**
Supplemental SheetPage 3 of 3

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))		Family Name or Surname	
Karl H.		Hellman	
Inventor's Signature <i>Karl H. Hellman</i>		Date <i>12/18/03</i>	
Ann Arbor Residence: City	MI State	USA Country	USA Citizenship
2690 Override Mailing Address			
Mailing Address			
Ann Arbor City	MI State	48104 Zip	USA Country
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))		Family Name or Surname	
Inventor's Signature			
Residence: City	State	Country	Citizenship
Mailing Address			
Mailing Address			
City	State	Zip	Country
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))		Family Name or Surname	
Inventor's Signature		Date	
Residence: City	State	Country	Citizenship
Mailing Address			
Mailing Address			
City	State	Zip	Country

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.